

REMARKS/ARGUMENTS

The following remarks and arguments are in response to the Office Action mailed April 29, 2005.

The text of the cancelled claims has been deleted as required and as noted by the Examiner.

Claim Amendments

Claims 33, 50, 51 and 52 have been amended to make it clear that the cured coating or cured layer contains a crosslinkable photopolymer or monomer and that the mechanically embossed texture overlying the photoinitiator ink is UV cured. The amendments are based on paragraphs [0035] and [0043] of the specification.

Claim Rejections – 35 U.S.C. §112

Claims 33, 47, 50, 51, 54 and 56-58 have been rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. The rejection alleges that the claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors at the time the application was filed had possession of the claimed invention. The rejection states further that the claims recite the portion of the cured layer coating disposed over the optional second ink is chemically embossed; however, the recitation is not fully supported in the present specification and nowhere in the specification discloses that the cured layer over the first ink is chemically embossed.

By way of background, applicants respectfully direct the Examiner's attention to paragraphs [0028] and [0034] of the specification wherein applicants have explained

that various kinds and combinations of inks can be used to carry out the invention. The terms "first ink," "second ink," "third ink" and the like are used for convenience but each time they are used in a claim or in the specification they are defined in context and used consistently in that context.

Regarding the optional second ink in the rejected claims, the term "second ink" is consistently defined as containing an inhibitor. One skilled in the relevant art knows that an inhibitor ink is used to create chemical embossing. The specification describes chemical embossing using an inhibitor ink, for example, in paragraph [0005], lines 23 and 24 which bridge pages 3 and 4 of the specification the applicants explain, "those portions of the gelled plastic layer which do not contain the inhibitor applied with the second printing ink, foam and expand." This is the classic definition of chemical embossing and clearly describes chemical embossing with an inhibitor ink which is defined in the context of the foregoing passage as a second printing ink.

Another passage in the specification which describes chemical embossing by means of the inhibitor in the second printing ink is paragraph [0046].

The Examiner notes that nowhere in the specification discloses that the cured layer over the first ink is chemically embossed. This is correct in the context of the definition of the first ink in the rejected claims as an ink containing a photoinitiator. The photoinitiator does not cause chemical embossing. But if an ink contains both a photoinitiator and an inhibitor, the chemical embossing is caused by the inhibitor and not the photoinitiator.

The Examiner also takes the position that it is recognized that the use of an inhibitor ink is to create the chemical embossing of the foam layer, not the cured coating (wear) layer. Applicants respectfully disagree, as explained below, but the specification has been amended in paragraphs [0018] and [0046] to make it clear that the expansion of the foam causes chemical embossing of the curable coating and the amended paragraphs are a basis for the language of the claims. This is clear from the original text of paragraph [0018] taken with FIGS. 3 and 4 of the drawings originally submitted with application which illustrate that the curable coating is embossed as a result of the foaming and expanding of the gelled plastic layer and thus the amendments to the specification are supported by the application as originally filed and do not include new matter. The amendments to the specification are also supported by the claims as originally filed and, again, there is no new matter.

Applicants submit further that the amendments to the specification are not even necessary to support the language of the claims. According to Webster's New Collegiate Dictionary, the term "emboss" means "to raise in relief from a surface". Accordingly, the curable coating is raised in relief from a surface as a result of the foaming and expansion of the gelled plastic layer. It is well known and understood in the floor covering art that the foaming and expansion of the gelled plastic layer results in the chemical embossing of that layer and every layer above it. The chemical embossing is not only in the foam layer, but it is in every layer raised in relief from a surface as a result of the foaming and expansion. In other words, chemical embossing is a type of embossing caused by a chemical reaction (expansion, foaming). The

reaction occurs in the foam layer but the foam layer is not the only layer that is embossed as a result of the reaction. The layers above the foam layer are embossed too as they must be or the surface of the product would not be embossed. Hence, the term "chemically embossed" has been defined in the art from the time of the first invention of chemical embossing as the texture or embossing created in the surface of the product. (See the original Congoleum patents on the invention of chemical embossing, U.S. Patents No. 3,293,094 and 3,293,108.)

In light of the foregoing, withdrawal of the rejection under the first paragraph of 35 U.S.C. §112 is respectfully requested.

Claim Rejections – 35 U.S.C. §103

Claims 33, 47, 50-52, 54 and 56-58 are rejected under 35 U.S.C. §103(a) as being unpatentable over Brossman, et al. (U.S. Patent No. 6,613,256) in view of Rutsch, et al. (U.S. Patent No. 5,147,901). In making the rejection, the Examiner excludes from the claims the second and third inks and limitations associated with them. Thus claim 33 is read as having, "a first ink containing a photoinitiator printed in a design on said foamed plastic layer" and "a cured coating or a cured layer containing a crosslinkable photopolymer or monomer overlaying the foamed plastic layer and first ink wherein the portion of the cured coating or cured layer disposed over the first ink is mechanically embossed with a UV cured first mechanically embossed texture"

Brossman has to do with a method of manufacturing a mechanically and chemically embossed surface covering having selectively textured surfaces. The product is chemically embossed by means of an inhibitor/retarder or activator

composition printed in a pattern (e.g., grout lines). A method is used whereby a temperature gradient difference is created between the foamed and non-foamed regions. A surface texture is then mechanically embossed into the wear layer and selectively set onto the wear layer substantially overlying the non-foamed regions. This is accomplished by attaining a mechanical embossing temperature in the surface overlying the non-foamed regions but not in the surface overlying the foamed regions.

The location of the selective mechanical embossing in the Brossman product is entirely dependent upon the location of the chemical embossing and accordingly must be in register with the chemical embossing. This is entirely different from the present invention wherein the location of the mechanical embossing is dependent upon the pattern of a printed photoinitiator ink. Of course, as admitted by the Examiner, Brossman does not disclose an ink containing a photoinitiator.

Rutsch discloses propiophenones as photoinitiators which can be combined with other compositions for photopolymerization of thin layers and printing inks. Another field of use is described by Rutsch as UV curing of plastic coatings for example, floor coverings. The Rutch propiophenones also are said to possess an increased resistance to yellowing. There is no discussion in Rutsch, however, that the increased resistance to yellowing is effective in his printing inks and there is no discussion in Rutsch that printing inks containing his propiophenones are used in floor covering. However, even if we assume that a Rutsch printing ink is employed to make floor covering, the combination of Brossman and Rutsch cannot render applicants' claimed invention obvious. First of all, the photoinitiator in the Rutsch inks is for curing the ink

and there is no suggestion to make a photoinitiator containing ink in Rutsch which would have sufficient photoinitiator to cure the portion of a coating overlying the ink. But even if the Rutsch ink had sufficient photoinitiator and the ink was used in the Brossman product, the mechanically embossed portion of the product could not be UV cured because the wear layer of Brossman does not contain a crosslinkable photopolymer or monomer. Accordingly, the combination of Brossman and Rutsch does not and cannot make applicants' claimed invention and withdrawal of the rejection is respectfully requested.

Double Patenting

Claims 33, 50-52, 54 and 56-58 have been provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims of applicants' co-pending Application No. 10/321,617. Applicants will address this issue as appropriate when allowable subject matter is found in the co-pending application.

Claim 47 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-57 of copending Application No. 10,321,617 in view of Brossman. Applicants respectfully request withdrawal of this rejection based upon the amendments to the claims submitted herewith and the foregoing remarks distinguishing Brossman from the presently claimed invention.

CONCLUSION

The instant application is believed to be in condition for allowance and a Notice of Allowance is respectfully requested. The Examiner is invited to telephone the undersigned at (908) 722-0700 if it is believed that further discussions, and/or additional amendment would help to advance the prosecution of the instant application.

CONDITIONAL PETITION FOR EXTENSION OF TIME

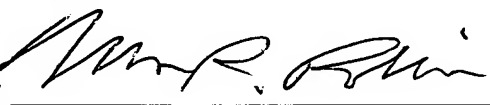
A petition for a two-month extension of time is submitted herewith. If entry and consideration of the amendments above requires a further extension of time, applicant respectfully requests that this be considered a petition therefor. The Assistant Commissioner is authorized to charge any fee(s) due in this connection to Deposit Account No. 14-1263.

ADDITIONAL FEE

Please charge any insufficiency of fees, or credit any excess, to Deposit Account No. 14-1263.

Respectfully submitted,

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